

Gabrielle Helena Saunders

Gabrielle Helena Saunders
National Center for Rehabilitative Auditory Research
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EDUCATION

- 1981-1985** University of London, Chelsea College, England
BSc. (Hons.) Human Biology with Psychology
- 1985-1989** MRC Institute of Hearing Research, University of Nottingham, England
Ph.D. Audiology/Psychology

PROFESSIONAL EXPERIENCE

- 2006-Current: Deputy Director for Education, Dissemination & Outreach, NCRAR, Portland OR.** Responsibilities include overseeing content NCRAR website and website committee, publication of educational brochures for professionals and consumers, public relations for NCRAR, oversight of NCRAR biennial conferences, organization of NCRAR Externship program, Editor for of NCRAR newsletter.
- 2003-Current: Assistant Professor, Department of Otolaryngology, Oregon Health Sciences University, Portland, OR.**
- 2001-Current: Research Investigator, National Center for Rehabilitative Auditory Research, Portland OR.** Duties include design of research studies in aural rehabilitation and hearing aid evaluation, with emphasis on outcome measurement and localization abilities. Additional responsibilities involve preparation and submission of merit-reviewed grant proposals, supervision of research audiologists, data analysis, preparation of manuscripts for publication, scientific presentations at local, national and international conferences and mentoring of post-doctoral staff.
- 1998-2000 Manager of Clinical Research, Decibel Instruments Inc. Fremont, CA.** Duties included the design and organization of clinical trials of hearing aids and software, statistical analysis of data (SPSS). In-house research included studies comparing audiometric measurement in dB HL versus dB SPL and its implications for audiometry and hearing aid fittings.
- 1996-1998 Research Scientist & Statistician, Scientific Learning, Berkeley, CA.** Carried out statistical analyses for a large-scale Beta trial of a computer-based training therapy (FastForWord I) for children with specific language impairment and language-based disabilities. Jointly developed an extensive battery of psychoacoustic measures for assessment of dyslexic children and adults, with the aim of understanding the underlying auditory processing deficits in dyslexia. Designed and carried out clinical trials of FastForWord I for special populations.

PROFESSIONAL EXPERIENCE (continued)

- 1995-1996** **Research Associate, Graduate Center of City University of New York, NY.**
Evaluated multi-microphone arrays for potential use in hearing aids with measures of speech discrimination, paired-comparisons and sound quality ratings.
- 1993-1995** **Co-Principal Investigator, VA RR&D Grant, East Orange VA Medical Center, NJ.** Designed and directed a large field trial comparing the features of programmable and non-programmable hearing aids. Developed a questionnaire for comparing attitudes towards hearing loss and hearing aids. Measured individual differences in psychoacoustic and psychosocial profiles in order to understand and predict hearing aid benefit and satisfaction.
- 1991-1993** **Research Associate, Rehabilitation Engineering Research Center, Lexington Center, NY.** Studied the relationship between performance, hearing aid satisfaction and the articulation index.
- 1990-1991** **Post-doctoral visiting scholar, Graduate Center of City University of New York, NY.** Developed and evaluated True-False test procedures and response time measures for testing speech discrimination.

CURRENT RESEARCH INTERESTS

Psychosocial issues in hearing loss, development and evaluation of outcomes measures for hearing aids, evaluation of localization abilities in normal and hearing impaired individuals, examination of the impact of directional microphones on sound localization, effects of dual sensory impairment upon auditory function.

OTHER PROFESSIONAL ACTIVITIES

Conference Co-chair for the National Center of Rehabilitative Auditory Research-sponsored conference titled 'Hearing Therapies for the Future' to be held in Portland Oregon, September 27th & 28th 2007

January 2007- Present: President of the Academy of Rehabilitative Audiology

Conference Co-chair for the National Center of Rehabilitative Auditory Research-sponsored conference titled 'The Aging Auditory System: Considerations for Rehabilitation', Portland Oregon, September 22nd & 23rd 2005

Jan 2005-Current: Assistant Editor, Journal of the American Academy of Audiology

Jan 2005-Current: Member R&D Committee Portland VA Medical Center

May 2004-Current: Member Executive Committee, National Center for Rehabilitative Auditory Research, Portland OR

Ad hoc reviewer for American Journal of Audiology, Ear and Hearing, Journal of Rehabilitation Research and Development, International Journal of Audiology

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Conference Co-chair and Program Committee Chair of the National Center of Rehabilitative Auditory Research-sponsored conference titled '*Auditory Rehabilitation: A Multi-dimensional Approach*'. Portland Oregon October 9th & 10th 2003.

Member of the Instructional Course Program Committee for the American Academy of Audiology Convention, November 2002.

AWARDS

- 1992-1995** **Department of Veterans Affairs RR&D grant to Matthes, Saunders & Levitt.** Programmable Hearing Aids: Measurement and Prediction of Benefit
- 2001-2004** **Department of Veterans Affairs RR&D grant to Saunders, Lilly & McDermott.** A test to measure performance and subjective impressions of auditory ability.
- 2002-2005** **Department of Veterans Affairs RR&D grant to Saunders & Fausti.** Effect of Individualized counseling on hearing aid acceptance.
- 2002-2005** **Department of Veterans Affairs RR&D grant to Saunders, Schuchard & Fausti.** A method for improving localization abilities of individuals with visual and auditory impairment.
- 2002-2005** **Department of Veterans Affairs RR&D Disability Supplement for Mitchel Turbin to Fausti & Saunders**
- 2004-2005** **Beltone/GN Resound funding to Saunders.** An evaluation of the efficacy of the Beltone AVE as a pre-fitting counseling tool.
- 2004-2005** **The National Organization for Hearing Research Foundation funding to Lewis & Saunders.** The impact of hearing aid microphone polar patterns on sound localization.
- 2005-2008** **Department of Veterans Affairs RR&D grant to Saunders.** The impact of hearing aid directional microphones on sound localization.
- 2005-2007** **Department of Veterans Affairs RR&D grant to Saunders & Lilly.** The Performance-Perceptual Test (PPT) as a counseling tool.

INVITED PRESENTATIONS

Invited speakers at the State of the Science Workshop on Hearing Enhancement at Gallaudet University, Washington DC September 18th – 20th 2006

Invited presenter at State of the Science Workshop: Assistive Technology Devices at Walter Reed Army Medical Center Washington DC April 21st 2006

VA Employee Education System satellite broadcast 'Measuring Hearing Aid Outcomes – not as easy as it seems' September 8th 2005.

Research Day Portland VA Medical Center (2005)

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Department of Speech and Hearing Sciences, Portland State University (2002)

Hearing Tonight Series, Portland, OR (2001)

National Center for Rehabilitative Auditory Research open house (2000)

Audiology Study Group of New York (1996)

New Jersey Speech & Hearing Association (1991)

GRADUATE AND UNDERGRADUATE TEACHING EXPERIENCE

1996	Adjunct Professor Kean College NJ.	Aural Rehabilitation
1992/1993	Adjunct Professor, Yeshiva University, NY.	Audiology, Hearing Mechanism
1992	Temporary Professor, Post University, Long Island, NY.	Research Methods
1992	Adjunct Professor City College, CUNY, NY.	Research Methods

PUBLICATIONS

Saunders, GH & Echt KV. Rehabilitation Strategies for Dual-Sensory Impairment. Submitted to Trends in Amplification.

Saunders GH, Forsline A. (2006) The Performance-Perceptual Test (PPT) and its application to hearing aid counseling. The Hearing Review 13(13), 18-25

Saunders, GH (in press). Considerations for selecting and fitting hearing aids for older adults. ASHA Perspectives Newsletter .

Saunders GH, Forsline, A & Jacobs, P. (2007) Attitudes toward Loss of Hearing Questionnaire (ALHQ): A comparison of electronic and paper formats. Journal of the American Academy of Audiology 18(1), 66-77

Saunders, GH; Forsline A. (2006) The Performance-Perceptual Test (PPT) and its relationship to aided reported handicap and hearing aid satisfaction. Ear and Hearing 27(3) 229-242.

Saunders GH & Fausti SA (2005) Advanced Hearing Aid Features: Directional Microphones and Telecoils. Proceedings from the National Center for Rehabilitative Auditory Research (NCRAR) conference: Auditory rehabilitation: A multidisciplinary Approach. Guest Editors Saunders & Fausti. Seminars in Hearing 26(2).

Saunders GH & Fausti SA (2005) Plasticity, Outcome Measures, and Evidence-based Practice. Proceedings from the National Center for Rehabilitative Auditory Research (NCRAR) conference: Auditory rehabilitation: A multidisciplinary Approach. Guest Editors Saunders & Fausti. Seminars in Hearing 26(3).

Saunders, GH; Chisolm, T, & Abrams HB (2005) Measuring Hearing Aid Outcomes – not as easy as it seems. Invited paper for special issue of Journal of Rehabilitation Research and Development 42(suppl. 2), 157-168

Saunders, GH, Cienkowski, KM, Forsline, A & Fausti, SA (2005) Normative data for the Attitudes towards Loss of Hearing Questionnaire. Journal of the American Academy of Audiology 16, 637-652.

Saunders, GH, Forsline, A. & Fausti, SA. (2004). The Performance-Perceptual Test (PPT) and its relationship to unaided reported handicap. *Ear and Hearing* 25, 117-126.

Saunders, GH & Jutai JW (2004) Hearing specific and generic measures of the psychosocial impact of hearing aids. *Journal of the American Academy of Audiology* 15, 238-248

Saunders, GH & Morgan DE (2003) Impact of measuring threshold in dB HL versus dB SPL on hearing aid targets. *International Journal of Audiology* 6, 319-326

Saunders GH & Cienkowski KM (2002) A test to measure subjective and objective speech intelligibility. *Journal of the American Academy of Audiology* 13, 38-49

Saunders, GH & Cienkowski, KM (1997) Acclimatization to hearing aids. *Ear & Hearing* 18, 129-139

Saunders, GH & Kates, J. (1997) Speech intelligibility enhancement using hearing aid array processing. *Journal of the Acoustic Society of America* 102, 1827-1837

Saunders GH (1997) Other Evaluative Procedures in H. Tobin: Practical Hearing Aid Selection and Fitting. Rehabilitation Research and Development Service. Monograph 001, 103-119

Saunders, GH & Cienkowski, KM (1996) Refinement and psychometric evaluation of the Attitudes to Loss of hearing Questionnaire (ALHQ). *Ear and Hearing* 17, 505-519

Saunders, GH, Cienkowski, KM & Levitt, H. (1994) The relationship between aided and unaided articulation indices, performance and subjective satisfaction with programmable hearing aids. *Journal of the Acoustical Society of America* 97, 3345 (A).

Saunders, GH. & Haggard, MP. (1993) The influence of personality-related factors upon consultation for two different marginal organic pathologies with and without reports of auditory symptomatology. *Ear and Hearing* 14, 242-248.

Saunders, GH. & Haggard, MP. (1992) The assessment of 'Obscure Auditory Dysfunction' (OAD) – 2.: Case-control analysis of determining factors. *Ear and Hearing* 13, 241-254.

Saunders, GH, Field, DL & Haggard, MP (1992) A clinical test battery for 'Obscure Auditory Dysfunction' (OAD): development, selection and use of tests. *British Journal of Audiology* 26, 33-42.

Saunders, GH. & Haggard, MP. (1989) The assessment of 'Obscure Auditory Dysfunction' (OAD) – 1: Auditory and psychological factors. *Ear and Hearing* 10, 200-208.

Cienkowski, KM & **Saunders, GH** (2000) Client-attitude questionnaire provides data that can help shape counseling strategies. *The Hearing Journal* 53, 42-49.

Dronkers, NF; Husted, DA; Deutsch, G; Taylor, MK; **Saunders, G.H.** & Merzenich, MM (1999). Lesion site as a predictor of improvement after "Fast ForWord" treatment in adult aphasic patients. *Brain & Language* 69, 450-452.

Merzenich, M. M., Saunders, G., Jenkins, W. M., Miller, S., Peterson, B., & Tallal, P. (1999). Pervasive developmental disorders: Listening training and language abilities. In S. H. Broman & J. M. Fletcher (Eds.), *The changing nervous system: Neurobehavioral consequences of early brain disorders* (pp. 365-385). New York: Oxford University Press.

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Merzenich, M. M., Miller, S., Jenkins, W. M., Saunders, G., Protopapas, A., Peterson, B., & Tallal, P. (1998). Amelioration of the acoustic and speech reception deficits underlying language-based learning impairments. In C. von Euler, I. Lundberg, & R. Llinas (Eds.), *Basic mechanisms in cognition and language* (pp. 143-172). New York: Elsevier.

Matthes RM, **Saunders GH**, Cienkowski KM, Levitt H. (1995). Programmable hearing aids: Evaluation and prediction of Benefit. Rehabilitation Research and Development Progress Reports 33, 226.

Lutman ME & **Saunders GH**. (1992) Lack of association between otoacoustic emissions and hearing difficulty in subjects with normal hearing thresholds. Journal of the Acoustical Society of America 92, 1184-1185.

RECENT PRESENTATIONS

Saunders, GH (2006) Considerations for rehabilitation of individuals with dual sensory impairment. Paper presented at the Academy of Rehabilitative Audiology Institute, Louisville, KY October 19th – 22nd 2006

Saunders, GH (2006) Impact of dual-sensory loss on technology selection and fitting. State of the Science Workshop on Hearing Enhancement, Gallaudet University, Washington DC September 18th – 20th 2006

Saunders, GH (2006) Hearing Loss and Hearing Aids. State of the Science Workshop: Assistive Technology Devices, Walter Reed Army Medical Center Washington DC April 21st 2006

Saunders, GH & Forsline, A. (2006). The Performance-Perceptual Test as a Counseling Tool. Poster presented at the International Hearing Aid Research Conference (IHCON), Lake Tahoe, CA, August 2006.

Forsline, A & **Saunders, GH** (2006). Performance-Perceptual Test (PPT) and hearing aid outcome. Paper presented at the American Academy of Audiology convention Minneapolis, MN April 5th – 9th 2006

Saunders GH & Forsline, A (2005). The Performance-Perceptual Test (PPT): Its relationship to unaided and aided hearing ability, and its use as a hearing aid counseling tool. Paper presented at the Academy of Rehabilitative Audiology Institute, Salt Lake City UT September 30th – October 2nd 2005.

Cienkowski, KM & **Saunders, GH** (2005). An Evaluation of Counseling Strategies Implemented by Audiologists. . Paper presented at the Academy of Rehabilitative Audiology Institute, Salt Lake City UT September 30th – October 2nd 2005.

Lewis, M.S., **Saunders, G.**, Gordon, J., Kusumoto, A., Jacobs, P. & Fausti, S. (2005). The impact of hearing aid microphone polar patterns on speech perception in noise. Paper presented at the American Auditory Society Annual Meeting, Phoenix, AZ. March

Saunders GH., Lewis, MS, Rheinsburg, B & Kusumoto, A, (2004) Impact of hearing loss, age and signal frequency upon sound localization ability. Paper presented at the International Hearing Aid Research Conference (IHCON), Lake Tahoe, CA, August 2004.

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Saunders GH & Jutai, JW (2005). The relationship between pre-use hearing aid expectations and generic vs. hearing aid-specific measures of outcome. Poster presented at the International Hearing Aid Research Conference (IHCON), Lake Tahoe, CA, August 2004.

Kusumoto A., Jacobs, P., **Saunders, GH.** & Lewis, MS (2004) Development of a 24-speaker sound localization test system. Poster presented at the International Hearing Aid Research Conference (IHCON), Lake Tahoe, CA, August 2004.

Forsline, A. & **Saunders, GH** (2004). The Performance-Perceptual Test as an Indicator of Hearing Aid Satisfaction Poster presented at the International Hearing Aid Research Conference (IHCON), Lake Tahoe, CA, August 2004.

Cienkowski, KM & **Saunders GH** (2004) The Relationship between client attitudes to hearing loss, hearing aids and hearing aid outcomes. (2004) Paper presented at the Academy of Rehabilitative Audiology Summer Institute, Saratoga Springs, New York.

Saunders GH, Forsline, A., & Sowards, J. The Performance-Perceptual Test of comparison of perceived versus measured performance. Poster presented at the International Hearing Aid Research Conference (IHCON), Lake Tahoe, CA, August 2002.

Saunders, GH & Cienkowski, KM. A measure of subjective & objective speech intelligibility. Poster presented at the 14th annual convention of the American Academy of Audiology, Philadelphia PA, April 2002

Saunders GH, Forsline, A., & Sowards, J. Reconciling discrepancies between perceived and measured speech understanding ability. Paper presented at the American Auditory Society, Scottsdale, AZ, March 2002

Saunders, GH, Sowards, J. & Forsline, A. Normative data for the perceptual-performance test of speech in noise. Poster presented at the 3rd Rehabilitation Research and Development Meeting, Arlington VA, February 2002

Saunders GH & Cienkowski KM. Revised Attitudes to Loss of Hearing Questionnaire (R-ALHQ). Podium presentation at the 13th annual convention of the American Academy of Audiology, San Diego CA, April 2001

Saunders GH. & Morgan DE. Comparison of fitting targets from dB SPL and dB HL data. Podium presentation at the 13th annual convention of the American Academy of Audiology, San Diego CA, April 2001

Morgan DE & **Saunders GH.** Real-ear-to-coupler difference variation across adult ears. Podium presentation at the 13th annual convention of the American Academy of Audiology, San Diego CA, April 2001

Sanders GH & Jutai JW. Psychosocial impact of hearing aids with a generic scale. Podium presentation at the 13th annual convention of the American Academy of Audiology, San Diego CA, April 2001

PUBLISHED ABSTRACTS

Saunders GH & Cienkowski, KM (1997) The relationship between aided articulation indices, performance, and subjective satisfaction with programmable and conventional hearing aids. Journal of the Acoustical Society of America 97(5): 3345

Saunders GH; Protopapas, A; Cangiano, G; Salz, T. & Cerles, L. (1998). Relation of backward masking and frequency discrimination to reading and language among 5- to 12-year-old children Journal of the Acoustical Society of America 104(3): 1800

Saunders GH (1992). A fully automated response time test of speech recognition. Journal of the Acoustical Society of America 92(4): 2385